



Wilmington Fire Department

Fire Prevention Bureau

801 Market St.

Wilmington, NC 28401

Telephone: (910) 343-0696 Fax: (910) 343-4772

Chief Frank Blackley, Fire Marshal

FIRE ALARM PLAN REVIEW REQUIREMENTS POLICY

January 2, 2002

Effective January 2, 2002 all requests for fire alarm permits submitted to this jurisdiction shall comply with the following specific design standards. The intent of these standards is to provide a uniform approach for the design community.

Drawings

Applies to all sheets

All sheets to be same size ("C" Size 24" X 36" Preferred)

Acceptable Scale 1/8" Minimum

All sheets to be the same scale.

Drawing Number, Revision & Date.

Name and Address of Project

Name and Address of Installing Contractor

Reviewed by Section on Title Block Showing NICET Certification Sub-Field, Level, Number and Expiry Date if required.

Type of System

Show Compass Points

Sheet Title

Key Plan for Building Sections

Clear and Legible Plans suitable for Photocopying

First Sheet (Title Sheet)

Name and Address of Building Owner

Name and Telephone Number of Installation Company Contact person

Contractors License Classification and Number

Name and Address of General Contractor (if Applicable)

Name and Address of Electrical Contractor (if Applicable)

Square Footage of each building and Total

Building Occupancy Type

Type of System: - Fire Alarm, Conventional Hardwired, Wireless, Addressable, Analog Addressable, Class "A", Class "B"

List applicable Codes and Standards with Editions used in the system design Bldg Code, Fire Code, NFPA 72, NFPA 70, UMC, Elev.,

All Approving Agencies, Name & telephone Number

Sequence of operation

Identify if wiring is enclosed in conduit, open wiring, power limited or non-power limited.

Contractor Notes with reference to this project

Fire Department notes with reference to this project

Name and Location of monitoring company

Type of Notification. (Temporal, Steady, Coded etc.)

Scope of Work
Box for AHJ Approval Stamp
Wiring Legend
Symbol List with Manufacturer, Part Number and backbox.
If insufficient space for Wiring Legend and Symbol List on Title sheet then insert an additional sheet.

Site Plan Sheet

Scale of Site Plan
Scale Bar Graph
Main Control Panel and all Sub Control Panel Locations
Fire Alarm Annunciators
Location of As Built Drawing Cabinet
Location of Lock Box

Floor Plan Sheets

Building Floor Plan
Sheet Title
Scale of Sheet
Scale Bar Graph
Location of All Doors Windows walls Exterior and Interior
Location of all obstructions exceeding 6ft above FFL.
Intended use of each room (e.g. Storage, Classroom, Restroom, Vestibule)
Location of all Air Supply and Return registers
Ceiling Heights, Ceiling Details and configuration may be shown on an additional sheet. With Reference Key
Full Height Cross Section of building. May be shown on an additional sheet. With reference key.
Mounting Heights of devices
Location of Main Fire Alarm Control Panel
Show location and source of Emergency Standby Power.
Location of all Annunciator panels, Sub Fire Alarm Panels, Booster Panels
Location of all Power sources, Panel Numbers and breaker Numbers for each piece of equipment
Show location of all Fire Alarm Detection and Notification devices. Along with Temperature ratings and Candela Ratings if applicable
Show location of all ancillary devices, i.e. Door Holders, Door closers, Gas shut off, Fan shutdown, Smoke dampers, Shunt trips, etc.
Show location of all Fire Sprinkler risers, Waterflow switches and tamper switches.
Show locations of all fire pumps and fire pump controllers.
Show all Access Doors and signage for Duct Detector Access.
Show all remote indicators for hidden devices.
Show zoning if a conventional system.
Show wiring type, size, number of conductors and approx. wiring layout
Show all Rated Walls
When T.I. Show adjacent Devices and Rooms.

Additional sheets as required

Show all areas of the building
Show all floors and all configurations.
Cross Sections
Ceiling Details.
Device Wiring Details
Device Spacing Typical
ADA Mounting Heights, Show Detail

Riser Diagram Sheet

Full Riser diagram showing all devices as connected in the circuit, Device addresses, room numbers and or names.

Details Sheet

Circuit Wiring Diagram

Typical device & Ancillary Device wiring

Voltage Drop Calculations Sheets

Voltage Drop calculations for each Notification Appliance Circuit showing wire size Circuit Current and Voltage drop.

Stand-by Battery Calculation Sheets

Standby Battery Calculations for each Control Panel, Sub Panel, Power Booster, Central Station Transmitter, Power supply.

**All of the above sheets are to be submitted as a complete set of plans for approval.
Approved plans must be kept on site during construction.**

Specification Package

TABLE OF CONTENTS (each section shall have tabs and be separated accordingly. Include table of contents.)

1. Fire Alarm Control Panels, Power Supplies and Annunciators
2. Detection Devices
3. Audio/Visual Devices
4. System Components, Modules and Relays
5. Battery Calculations and cut sheets (calcs shall also be on plans)
6. Voltage Calculations (shall also be on plans)
7. Compatibility Listings (matrix, table, or info showing device compatibility)
8. Operating Instructions for entire System (*This will include a copy of what will be posted adjacent to FACP in cabinet*)
9. Manufacturers Inspections Instructions – NFPA Chapter 7
10. NICET Certificate (when required or if prepared by NICET)

As-Built Drawing Cabinet to be provided

An AS BUILT Drawing Cabinet shall be installed at each project that has a new Fire Alarm System and located where acceptable to the Fire Marshal. The cabinet shall be keyed the same as the alarm panel.

The cabinet shall contain the following:

- Complete set of As Built Drawings
- A copy of each Permit
- A copy of the Fire Marshal Inspection Report
- A copy of the original test printout
- A hard copy print out of the system configuration if a programmable system
- A copy of each maintenance inspection report
- Operating Instructions
- A copy of the equipment submittals.
- Voltage Drop Calculations
- Battery Calculations
- Any keys required for the system.

END